

Technical Excellence Practical Experience Client Responsiveness

July 17, 2019

Mike Nickerson, CHMM Environmental/Safety Coordinator Central Bucks School District 320 West Swamp Road Doylestown, PA 18901

Re: Lead in Drinking Water Sample Collection and Reporting Gayman Elementary School 4440 Point Pleasant Pike Doylestown, PA 18902 Bucks County, Pennsylvania

Dear Mr. Nickerson:

This document has been prepared by Langan to provide the results of the drinking water sampling activities at the above referenced school. Langan sampled the drinking water sources (e.g. fountains, sink faucets, etc.) as identified by the Central Bucks School District facility inventory. The collected samples were sent to the Pennsylvania certified environmental laboratory, PACE Analytical, and analyzed for total lead by USEPA Method 200.8, to meet Pennsylvania's action level requirements.

The results did not detect any exceedances at this school of the Pennsylvania Action Level of 15 micrograms per liter (ug/L).

As requested by Mike Nickerson, here is a list of locations with lead results above 10 ug/L, but below Pennsylvania Action Level of 15 ug/L are as follows:

| / | 0. | |
|-----------------|------------------|---------------|
| <u>Location</u> | <u>Sample ID</u> | <u>Result</u> |
| Rm 30 | G30 | 11.3 ug/L |

A field sketch of the sampling locations and copy of the laboratory report is attached.

Sincerely, Langan Engineering & Environmental Services, Inc.

John U. Musco

John V. Musco Associate

Enclosure

cc: R. Copenhaver, PG – Langan B. Lambing. - Langan Tyler Arinder – Langan

NJ Certificate of Authorization No. 24GA27996400

\\langan.com\data\DYL\data4\200130401\Project Data\Record Data\Reports\Day 8_6-14-19 Tohickon_Gayman_Groveland\Gayman_Lead_Sampling_Memo.docx

LANGAN



Pace Analytical Services, LLC 575 Broad Hollow Road Melville, NY 11747 (631)694-3040

June 28, 2019

Randy Copenhaver Langan Engineering 2700 Kelly Road, Suite 200 Warrington, PA 18976

RE: Project: CENTRAL BUCKS SCHOOL (GAYMAN) Pace Project No.: 7094195

Dear Randy Copenhaver:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Joh Sh

John D. Stanton john.stanton@pacelabs.com (631)694-3040 Project Manager

Enclosures

cc: Bill Lambing, Langan Engineering





CERTIFICATIONS

Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 7094195

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747 New York Certification #: 10478 Primary Accrediting Body New Jersey Certification #: NY158 Pennsylvania Certification #: 68-00350 Connecticut Certification #: PH-0435 Maryland Certification #: 208 Rhode Island Certification #: LAO00340 Massachusetts Certification #: M-NY026 New Hampshire Certification #: 2987



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

| Sample: A24 | Lab ID: | 7094195001 | Collected: 06/14/ | 19 04:46 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
|--------------------------------|------------|---------------|-------------------|----------|-----------|----------------|------------------|---------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:1 | 15 7439-92-1 | |
| Sample: A18F | Lab ID: | 7094195002 | Collected: 06/14/ | 19 04:48 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:2 | 24 7439-92-1 | |
| Sample: GA8 | Lab ID: | 7094195003 | Collected: 06/14/ | 19 04:48 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:2 | 27 7439-92-1 | |
| Sample: G1 | Lab ID: | 7094195004 | Collected: 06/14/ | 19 04:51 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:3 | 30 7439-92-1 | |
| Sample: G2 | Lab ID: | 7094195005 | Collected: 06/14/ | 19 04:51 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:3 | 33 7439-92-1 | |
| Sample: G3 | Lab ID: | 7094195006 | Collected: 06/14/ | 19 04:53 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 1. | 3 ug/L | 1.0 | 1 | | 06/27/10 19:3 | 36 7439-92-1 | |



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

| Sample: G4 | Lab ID: | 7094195007 | Collected: 06/14/1 | 9 04:53 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
|--------------------------------|------------|---------------|--------------------|---------|-----------|----------------|------------------|---------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:4 | 15 7439-92-1 | |
| Sample: G5 | Lab ID: | 7094195008 | Collected: 06/14/1 | 9 04:55 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:4 | 18 7439-92-1 | |
| Sample: G6 | Lab ID: | 7094195009 | Collected: 06/14/1 | 9 04:55 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:5 | 51 7439-92-1 | |
| Sample: G7 | Lab ID: | 7094195010 | Collected: 06/14/1 | 9 04:57 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:5 | 54 7439-92-1 | |
| Sample: G9 | Lab ID: | 7094195011 | Collected: 06/14/1 | 9 04:57 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 18:5 | 57 7439-92-1 | |
| Sample: G10 | Lab ID: | 7094195012 | Collected: 06/14/1 | 9 04:58 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 19:0 | | |



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

| Sample: G12 | Lab ID: | 7094195013 | Collected: 06/14/ | 19 05:00 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
|--------------------------------|------------|---------------|-------------------|----------|-----------|----------------|------------------|---------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 19:0 | 09 7439-92-1 | |
| Sample: G13 | Lab ID: | 7094195014 | Collected: 06/14/ | 19 05:00 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 19:1 | 12 7439-92-1 | |
| Sample: G14 | Lab ID: | 7094195015 | Collected: 06/14/ | 19 05:01 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 19:2 | 21 7439-92-1 | |
| Sample: G15 | Lab ID: | 7094195016 | Collected: 06/14/ | 19 05:20 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 4. | 4 ug/L | 1.0 | 1 | | 06/27/19 19:2 | 25 7439-92-1 | |
| Sample: G16 | Lab ID: | 7094195017 | Collected: 06/14/ | 19 05:20 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 3. | 2 ug/L | 1.0 | 1 | | 06/27/19 19:2 | 28 7439-92-1 | |
| Sample: G31 | Lab ID: | 7094195018 | Collected: 06/14/ | 19 05:21 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/10 10.3 | 31 7439-92-1 | |



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

| Sample: G32 | Lab ID: | 7094195019 | Collected: 06/14/ | 19 05:21 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
|--------------------------------|------------|---------------|-------------------|----------|-----------|----------------|------------------|---------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 19:3 | 34 7439-92-1 | |
| Sample: G29 | Lab ID: | 7094195020 | Collected: 06/14/ | 19 05:22 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 19:3 | 37 7439-92-1 | |
| Sample: G30 | Lab ID: | 7094195021 | Collected: 06/14/ | 19 05:22 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 11. | 3 ug/L | 1.0 | 1 | | 06/27/19 19:4 | 46 7439-92-1 | |
| Sample: G17F | Lab ID: | 7094195022 | Collected: 06/14/ | 19 05:02 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:0 | 01 7439-92-1 | |
| Sample: G17 | Lab ID: | 7094195023 | Collected: 06/14/ | 19 05:03 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:0 |)4 7439-92-1 | |
| Sample: G18 | Lab ID: | 7094195024 | Collected: 06/14/ | 19 05:03 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/10 20.0 |)7 7439-92-1 | |



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

| Sample: G19 | Lab ID: | 7094195025 | Collected: 06/14/1 | 9 05:05 | Received: (| 06/18/19 11:00 | Matrix: Drinking | g Water |
|--------------------------------|------------|----------------|--------------------|---------|-------------|----------------|------------------|---------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | 3. | 9 ug/L | 1.0 | 1 | | 06/27/19 20:1 | 0 7439-92-1 | |
| Sample: G20 | Lab ID: | 7094195026 | Collected: 06/14/1 | 9 05:05 | Received: (| 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:1 | 3 7439-92-1 | |
| Sample: GLF | Lab ID: | 7094195027 | Collected: 06/14/1 | 9 05:06 | Received: (| 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | 1. | 4 ug/L | 1.0 | 1 | | 06/27/19 20:1 | 6 7439-92-1 | |
| Sample: GLWR | Lab ID: | 7094195028 | Collected: 06/14/1 | 9 05:06 | Received: (| 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 1. | 3 ug/L | 1.0 | 1 | | 06/27/19 20:1 | 9 7439-92-1 | |
| Sample: G21A | Lab ID: | 7094195029 | Collected: 06/14/1 | 9 05:10 | Received: (| 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 1. | 8 ug/L | 1.0 | 1 | | 06/27/19 20:2 | 2 7439-92-1 | |
| Sample: G21B | Lab ID: | 7094195030 | Collected: 06/14/1 | 9 05:10 | Received: (| 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:2 | | |



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

| Sample: G22 | Lab ID: | 7094195031 | Collected: 06/14/ | 19 05:10 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
|--------------------------------|------------|----------------|-------------------|----------|-----------|----------------|------------------|---------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:3 | 34 7439-92-1 | |
| Sample: G23 | Lab ID: | 7094195032 | Collected: 06/14/ | 19 05:13 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:4 | 44 7439-92-1 | |
| Sample: G24 | Lab ID: | 7094195033 | Collected: 06/14/ | 19 05:13 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | <1. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:4 | 47 7439-92-1 | |
| Sample: G25 | Lab ID: | 7094195034 | Collected: 06/14/ | 19 05:14 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | 2. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:5 | 50 7439-92-1 | |
| Sample: G26 | Lab ID: | 7094195035 | Collected: 06/14/ | 19 05:14 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 20 | 00.8 | | | | | |
| Lead | 2. | 0 ug/L | 1.0 | 1 | | 06/27/19 20:5 | 53 7439-92-1 | |
| Sample: G27 | Lab ID: | 7094195036 | Collected: 06/14/ | 19 05:16 | Received: | 06/18/19 11:00 | Matrix: Drinking | g Water |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical | Method: EPA 2 | 00.8 | | | | | |
| Lead | 4. | 2 ug/L | 1.0 | 1 | | 06/27/19 20.4 | 56 7439-92-1 | |



Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 7094195

| Sample: G28 | Lab ID: 7094195037 Collected: 06/14/19 05:16 Received | | | | | ved: 06/18/19 11:00 Matrix: Drinki | | | |
|--------------------------------|---|----------------|--------------------|---------|--------------|------------------------------------|------------------|-------|--|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual | |
| 200.8 MET ICPMS Drinking Water | Analytical Met | hod: EPA 200.8 | 8 | | | | | | |
| Lead | 2.7 | ug/L | 1.0 | 1 | | 06/27/19 20:5 | 59 7439-92-1 | | |
| Sample: C11 | Lab ID: 709 | 4195038 (| Collected: 06/14/1 | 9 04:58 | Received: 06 | 6/18/19 11:00 | Matrix: Drinking | Water | |
| Sample: G11 | | 4100000 (| | | | | 5 | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual | |
| | | Units | Report Limit | | Prepared | Analyzed | 0 | | |